# JUXTA F Series General Specification

Model FX1□-LM (Variable software type) Limiter

JUXTA

## 1. GENERAL

This is a variable software type computing unit which accepts a voltage signal from various converters and acts as an ordinary converter for the input between the upper and lower limit values but for input exceeding the above limits outputs an isolated DC voltage or current signal corresponding to these limit values.

## 2. SPECIFICATIONS

| | |
|---|---|
| Model No. | FX1A-LM, FX1V-LM |
| Input signal | DC voltage signal: 1 point<br>$V_0$ to $V_{100}$ correspond to 0 to 100%. |
| Measuring range | 0 to 10 V DC (Measuring span: More than 2 V) (*1) |
| Input resistance | 1 MΩ (At power failure: More than 100 KΩ) |
| Output signal | 4 to 20mA, 2 to 10mA, 1 to 5mA, 0 to 20mA, 0 to 16mA, 0 to 10mA or 0 to 1mA DC<br>0 to 10mV, 0 to 100mV, 0 to 1V, 0 to 10V, 0 to 5V, 1 to 5V or −10 to +10V DC |
| Limit value setting range | Upper limit = 0.0 to 100.0% (*2)<br>Lower limit = 0.0 to 100.0% (*3)<br>However, at upper limit < lower limit, upper limit value is output. |
| Basic accuracy | ±0.1% of measuring span |
| Signal insulation | Between input signal and output signal/power supply circuits, and between output signal and power supply circuits |
| Insulation resistance | Between input signal and output signal/power supply circuits, between output signal and power supply circuits: 100 MΩ/500 V DC |
| Dielectric strength | Between input signal and output signal/power supply circuits: 1500 V AC/min<br>Between output signal and power supply circuits: 500 V AC/min |
| Power supply voltage | 24 V DC ± 10% |
| Ambient temperature/humidity | 0 to 50°C (32 to 122°F) and 5 to 93% relative humidity (No condensation) |
| Effect of ambient temperature | ±0.2% of span for 10°C (50°F) change |
| Effect of power supply voltage | ±0.1% of span for 24 V DC ±10% variation |
| Power consumption | 24 V DC, 60 mA (Voltage output) and 24 V DC, 82 mA (Current output) |
| Dimensions | 72 (2.83″) H × 24 (0.94″) W × 127 (5.00″) D mm (inch) |
| Weight | Approx. 130 g |
| Accessories | Tag number label : 1 sheet<br>Mounting blocks: 2 pcs. |

Specify the following when ordering:
(*1) Measuring range from □ to □ mV.
(*2) Upper limit value; □%
(*3) Lower limit value; □%

FX1□-□□-□□*B

**MODEL**

**SOFTWARE TYPE**
1: Variable type

**OUTPUT**
A: Current
V: Voltage

**INPUT SIGNAL**
1: Voltage signal
0: Current signal (non standard)

**OUTPUT SIGNAL**

| | |
|---|---|
| A: 4~20mA DC | 1: 0~10mV DC |
| B: 2~10mA DC | 2: 0~100mV DC |
| C: 1~5mA DC | 3: 0~1V DC |
| D: 0~20mA DC | 4: 0~10V DC |
| E: 0~16mA DC | 5: 0~5V DC |
| F: 0~10mA DC | 6: 1~5V DC |
| G: 0~1mA DC DC | 7: -10~+10 DC |
| Z: Specify current. (30mA max.) | 0: Specify voltage. (-10V~+10V) |

Ordering Information

| Measuring Range of Input | |
|---|---|
| Voltage input signal:<br>2V min. Span for 0~10V DC<br>Current input signal (input resist. 250Ω):<br>(250Ω) x (Input current) shall be within the measuring span of voltage input signal. | |
| | Recommended Range |
| Current signal | 4~20mA DC<br>2~10mA DC<br>0~20mA DC<br>0~16mA DC<br>0~10mA DC |
| Voltage signal | 0~10V DC<br>0~ 5V DC<br>1~ 5V DC |

(Note) Change of input between voltage and current is impossible by Handy Terminal.

OUTPUT RESISTANCE AND LOAD RESISTANCE

| Output Signal | Load Resistance | Output Impedance |
|---|---|---|
| 4 to 20mA DC | 0 to 750Ω | 5MΩ or more |
| 2 to 10mA DC | 0 to 1500Ω | |
| 1 to 5mA DC | 0 to 3000Ω | |
| 0 to 20mA DC | 0 to 750Ω | |
| 0 to 16mA DC | 0 to 900Ω | |
| 0 to 10mA DC | 0 to 1500Ω | |
| 0 to 1mA DC | 0 to 15kΩ | |

| Output Signal | Load Resistance | Output Impedance |
|---|---|---|
| 0 to 10mV DC | 100kΩ or more | 100Ω or less |
| 0 to 100mV DC | | |
| 0 to 1V DC | 2kΩ or more | 1Ω or less |
| 0 to 5V DC | | |
| 1 to 5V DC | | |
| 0 to 10V DC | 10kΩ or more | |
| -10 to +10V DC | | |